

EXHIBIT J

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BioWorld Picks the People Who Are Shaping the Industry's Growth

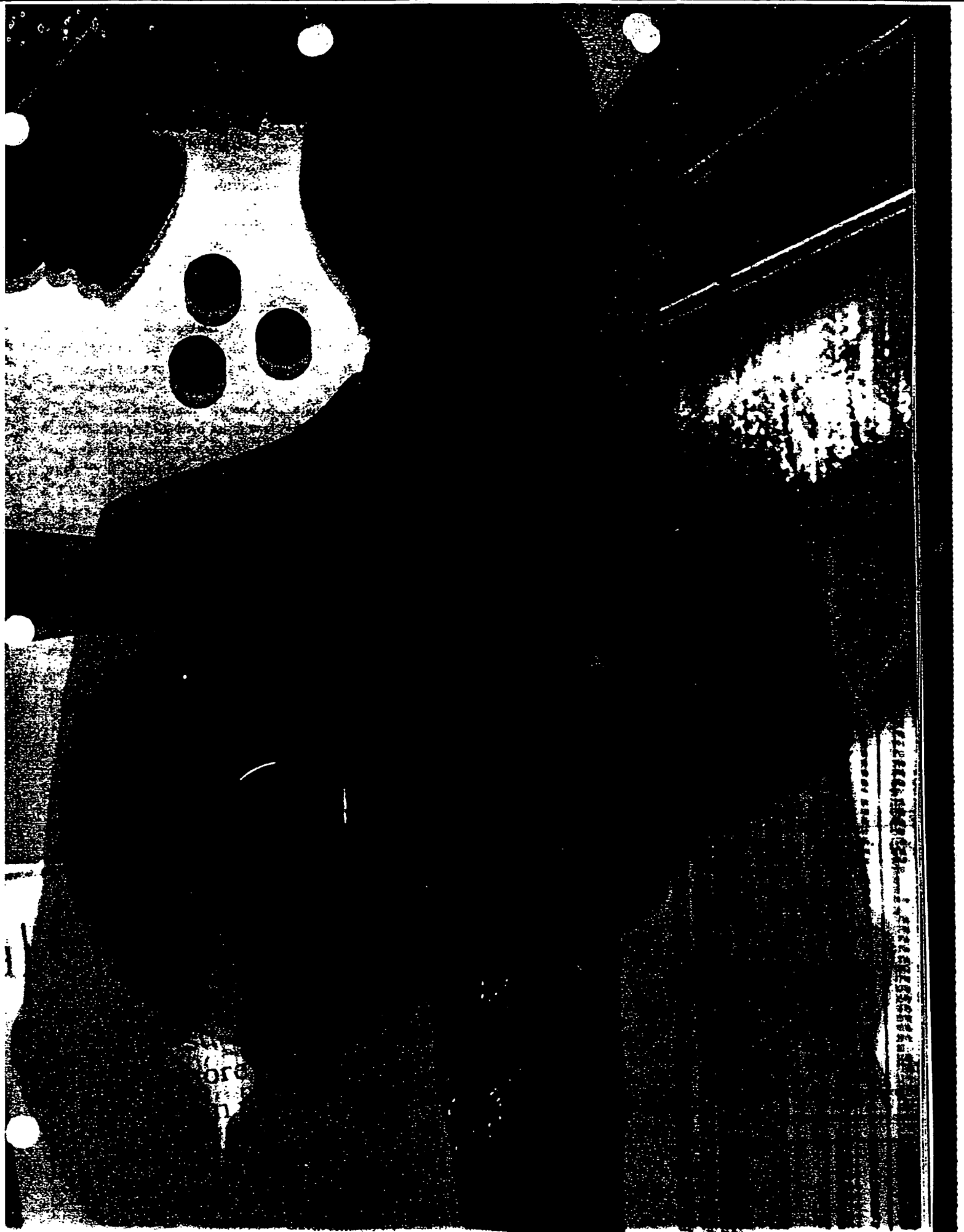


Most of us are well acquainted with the history of early biotech and the people who created the first companies, but today a new group has emerged to control the growth and development of the biotechnology industry.

Here at *BioWorld*, we have spent the past year immersed in news about companies, people, issues and legislation. From that experience has come a picture of where the most important events are likely to occur in the industry over the next few years and who will make them happen.

On these pages you will find our candidates for the most important people in biotech today. They are the people who are working to build and develop new aspects of our industry, trying to create the structures that will allow biotechnology to endure and to grow, and who will throw some strong challenges our way. They come from biotech and pharmaceutical companies, from the financial community, from the science world and from within the Washington Beltway, and they will have a major impact on the growth and evolution of the biotech industry in the early 1990s.

This is a very personal list; we don't pretend to have done a clinical evaluation. We haven't restricted ourselves to any particular number of choices. The list reflects our admittedly opinionated prediction of who will most influence the industry in the next year. In a world of surprises, the one thing we can be sure of is that these people aren't the ONLY ones who we will be hearing from. There will certainly be others. Tell us about any you have spotted, and we'll include them next time around.



Companies

Dennis Longstreet

President of Johnson & Johnson's Ortho Biotech subsidiary, Raritan, N.J.: Heads the first stand-alone biotech subsidiary to come out of the pharmaceutical industry.

While he inherited some rocky territory – the relationship with Amgen concerning erythropoietin (EPO) leaves much to be desired – Ortho Biotech has put together a good collaboration with Xoma to commercialize that small biotech company's monoclonals for treatment of graft-vs.-host rejection and rheumatoid arthritis, and is assembling a product portfolio of colony-stimulating factors and monoclonals to key biological response modifiers.

He has in place a group with expertise in the classical pharmaceutical areas of medicinal chemistry, and clinical and regulatory affairs, with the extra attraction of biotech expertise: mouse and human monoclonal antibodies, recombinant DNA and protein/peptide technologies. So far, Ortho Biotech is the only company with a monoclonal therapeutic on the market.

Hollings Renton

President and Chief Operating Officer, Cetus Corp., Emeryville, Calif.: Following the departure of Robert Fildes, Renton has the critical task of rebuilding Cetus. That's no easy job in the light of some of the highest losses in the industry, the initial failure of the company's flagship product, interleukin-2, to get the nod from the Food and Drug Administration's advisory panel, a shortage of inspirational products and a long-standing policy of freewheeling spending.

Renton joined Cetus in 1981 as treasurer and controller and has steadily worked his way up. Along the way, he played key roles in structuring Cetus' joint ventures and partnerships, particularly the critical joint venture with Ben Venue Laboratories Inc., which brought chemotherapeutic drugs into Cetus, and the funding to support founding Euro-Cetus, the company's European subsidiary that is marketing Cetus products overseas.

Michael Riordan

CEO/President of Gilead Sciences Inc., Foster City, Calif.: As founder of the first company created to bring antisense technology into the clinic. Riordan managed to raise the most money at the highest valuation of almost any deal done in 1989, despite having a very young management team with no experience operating a company. (Known at *BioWorld* as the Mikes, Riordan and Michael Bigham, his chief financial officer, are both 33.) A very strong, charismatic, personality. Pulled together a \$20 million deal with Glaxo, the third-largest pharmaceutical company in the world. While many of us initially had doubts about the ability of his unseasoned team to compete against the groups from SmithKline & French (Isis) and Gen-Probe (Genta), so far he has proved us wrong. Can he keep it up over the long haul and bring these novel products to the marketplace despite substantial development and regulatory hurdles?

Roger Salquist

CEO/chairman of Calgene Inc., Davis, Calif.: Salquist is running the company most likely to bring the first genetically engineered foods to the Food and Drug Administration for marketing approval. The fate of the agbiotech sector will be affected profoundly by how well he orchestrates his company's role in this critical interaction. His, shall we say forceful, outcries against activists who advise caution in setting loose genetically engineered plants and bugs have many concerned about how successful he will be at convincing the public to provide a market for these products. He should get a clue from the fate of Bob Fildes.

James P. Sherblom

Chairman and CEO, Transgenic Sciences, Inc., Worcester, Mass.: Took a very long-term and slightly potty concept (using transgenic animals to manufacture recombinant products) and used his business smarts to create and grow a business. He's been steadily acquiring a roster of pre-clinical testing labs and corporate partners that will provide a stream of revenue while the more long-term aspects of the business evolve. He must have played Monopoly as a kid.



Dennis Longstreet,
Ortho Biotech



James P. Sherblom,
Transgenic Sciences, Inc.

Ron Unterman

VP of R&D for Envirogen, Inc., Lawrenceville, N.J.: Came to Envirogen from GE, where he headed up the ground-breaking group developing microbes that degrade PCBs. Envirogen is focused on the bioremediation of the most difficult hazardous wastes, such as PCBs, TCE and others. Alpha Environmental's field work with the Gulf oil spills and the Environmental Protection Agency's newfound interest in bioremediation indicate the sector will be a major area of growth, and one where success could go a long way to giving biotech a boost with the public. (See article on page 46.)

Virginia Walker

VP of finance, California Biotechnology Inc., Mountain View, Calif.: Pulled together about 80 of the biotech industry's key financial officers last summer for the first conference of the association of biotechnology financial officers, one of the most lauded conferences ever. It addressed real issues, with an eye to problem-solving. Her peers see her as the driving force behind that meeting and the creation of the association, which provides the first real forum for biotech chief financial officers to discuss the unique problems of raising a young biotech company. As the usual public and private sources of cash fail to support the continued growth of the industry, this group of company executives and their ability to be creative about sources of capital will be critical to the survival of the industry.

The feisty Walker, along with Chief Executive Officer and President Rich Casey, has been instrumental in Cal Bio's ongoing turnaround by forcing cost controls and teaching the in-house science staff how to manage budgets. Her experience in the computer industry is coming in handy. Cal Bio was rapidly heading to the bottom of the biotech stock lists of most analysts, primarily because of its mounting losses, huge number of ongoing projects and apparent inability to bring products past the research phase. The company has pared down its projects, is moving products through clinical testing and seems to be heading toward black ink.

Experienced Business Quartet

Art Benvenuto, Chairman, president and CEO of Marrow-Tech, La Jolla, Calif.; **John Groom**, president and CEO of Athena Neurosciences Inc., South San Francisco, Calif.; **Alan Timms**, president and CEO of Glycomed Inc., Alameda, Calif.; and **Glenn French**, president and CEO of Applied ImmuneSciences, Menlo Park, Calif.: These people have been part of the movement of experienced pharmaceutical executives into biotech companies, which are beginning to realize that they can't leave management to brilliant but unsavvy scientists. The first wave of biotech companies were initially run by founding scientists and/or financial people (venture capitalists like Bob Swanson) with no experience operating a company. While this did work to some extent, since the companies were not stifled by procedures and red tape, the lack of real-life experience began to tell as the stock market became more demanding and cash reserves ran low. There is a growing trend of founders who recognize the need to support their high-flying technology with hard-core business and financial strategy that comes only from experience.

Hence the presence of this quartet. Their companies represent some of the more important technologies under development in the industry: carbohydrate technology (Glycomed); neurobiology (Athena); cell replacement therapies (Marrow-Tech); and manipulation of the immune response for prevention and treatment of disease (Applied ImmuneSciences). The fate of these companies rests on the ability of their chief executive officers to survive extensive product development and reach the marketplace.

Financial World

David Blech

Founder of Blech & Co., New York: David and his brother, Isaac, made a big name for themselves in the 1980s by building numerous companies: Nova Pharmaceutical Corp., DNA Plant Technology, Cambridge Bioscience and Celgene. Many turned against the Blechs when these stocks became dogs in the late '80s. David's actions over the past 12 months indicate that his new strategy



Ron Unterman,
Envirogen, Inc.



Art Benvenuto,
Marrow-Tech



Alan Timms,
Glycomed Inc.



Glenn French,
Applied ImmuneSciences



Denise Gilbert,
County NatWest



Yasunori Kaneko,
Paribas Capital Markets Ltd.



Stelios Papadopoulos,
PaineWebber



Nancy Olson,
Independent

is to find financially ailing companies with promising products or technologies and attempt a resuscitation. Examples are Ecogen, Bio-Technology General Corp. and Liposome Technology. His attempt to aid in the MABS/Quidel merger was squashed by the nasty turn taken by the stock market in response to Iraq's adventure. He also put together the stellar deal of 1990, bringing George Rathmann, Chris Henney and Robert Nowinski together in a company, Icos, that will try to develop products from one of the most promising new technologies, cellular adhesion molecules.

Denise Gilbert

Pharmaceutical/biotech analyst at County NatWest, San Francisco: Denise has provided some of the most insightful and original analysis of the biotech industry, bringing to bear a keen technical mind combined with a hard-core financial expertise. Her reports on the companies and important issues in the industry at large have helped many an industry observer get a better grip on the substance beneath the hype and excitement. She is one of the few people to develop valuation models that seem to approach reality and can actually explain, in English, the intricacies of patent battles and the realistic interpretations to be made from clinical trial data.

Unlike some of her brethren on the Street, Gilbert has never written an inflammatory report just to make stocks move. Her firm, which recently lured Gilbert from Montgomery Securities, is aggressively building a team of financial specialists in the United States and Europe. Gilbert sees her move as an opportunity to bring an increased level of global perspective to her observations about the biotech and pharmaceutical worlds.

Yasunori Kaneko

Head of corporate finance, Paribas Capital Markets Ltd., Tokyo: Kaneko is one of the key players arranging strategic alliances between U.S. biotechnology companies and Japanese companies that have capital to invest. As Japan's role in providing capital, technology and market access to U.S. companies grows, the need for bicultural leaders in the financial world grows as well. Kaneko represents a new breed of transPacific enablers.

His background has helped make him uniquely qualified to arrange partnerships for biotechnology companies on either side of the Pacific. He received a medical degree from Keio University in Tokyo before attending Stanford University Business School. After receiving an MBA from Stanford in 1981, he was hired by Genentech Inc., where he was product manager for Protopin (human growth hormone) and organized a project team that developed a second-generation recombinant human growth hormone. As marketing manager at Genetech, Kaneko supervised licensing agreements with several Japanese companies.

Since joining Paribas Capital in 1987, Kaneko has arranged numerous licensing and investment deals for U.S. and Japanese companies, including a partnership between Cygnus Research and Nichiban. Kaneko spends most of his time in Japan now, encouraging Japanese clients to acquire U.S. companies. Japanese companies are still learning how to use investment banking companies to help target potential investments and structure a deal. Kaneko is showing the way.

Stelios Papadopoulos

Managing director of investment banking, PaineWebber, New York: A scientist gone astray, Stelios has put his strong technical background to work for the biotech industry by sniffing out the companies with strong technology but less-than-stellar earnings and general sex appeal. The consensus from CEOs of the younger biotech companies is that Stelios represents the best of the financial community. He is taking a leadership role in creating financing vehicles for those companies that represent the next wave in biotech, not just supporting the top tier of well-known companies. Willing to take risks to help the industry evolve and grow beyond the protein-based therapeutics companies.

He gets top credit for publicly stating his intention to raise mezzanine financing for companies at a time when the venture community and the biotech companies are bemoaning the lack of such funds. Stelios

is concerned that private companies are feeling pressured into going public too soon or are running to Japan because they perceive a lack of these intermediate funds. He did seven initial public offerings last year when others were claiming that the market wasn't ready. And everyone is jealous of his Icos achievement, a venture kind of deal that raised \$33 million in the public marketplace.

Younger VC Generation

Nancy Olson, former general partner at Sequoia Capital, Menlo Park, Calif., now independently financing new biotech and medical companies; **Joe Lacob**, partner at Kleiner, Perkins, Caufield & Byers, Palo Alto, Calif.; **Larry Bock**, general partner, Avalon Ventures, La Jolla, Calif.; **Chris Gabrielli**, Bessemer Venture Partners, Menlo Park; **Ken Kelley**, (partner, Institutional Venture Partners): These younger members of the venture community have played an important role in the creation of a number of new companies formed to develop novel technologies into commercial products. They are serving as champions to force the stodgier members of their funds to continue to finance enabling technologies and good companies, despite the current prejudice in the venture capital community that biotech is too risky. Companies they have helped form are developing key technologies, including carbohydrate technology, diagnostics and therapeutics aimed at osteoporosis and bone degenerative diseases, viral diseases and neurodegenerative diseases, gene therapy and transgenics, cell separation and replacement therapies, manipulation of the immune response, novel drug delivery methods for feasible clinical use of the new therapeutics, etc.

Regulatory/Public Policy

Rep. Robert W. Kastenmeier

D-Wis., chairman of the House Subcommittee on Courts, Intellectual Property and the Administration of Justice, Washington: Kastenmeier will make or break the so-called "Boucher bill," introduced earlier this year by Rep. Rick Boucher, D-Va., and designed to increase the protection of biotechnology process patents from foreign competitors. The bill has sharply divided the biotech industry; some say it will help the industry protect

process patents, and others say it is bad public policy. Kastenmeier also has pushed an omnibus patent bill that, among other provisions, would exempt farmers from paying royalties for patented animals.

Margaret Mellon

Director, Biotechnology Policy Center, National Wildlife Federation, Washington: Mellon has her hand in all biotechnology regulatory decisions that affect the environment. She's drawn attention to the transgenic carp (with trout growth hormone) released in Alabama, and rabies vaccine released in raccoons in Virginia. Mellon constantly calls for Congress, not federal agencies, to take the lead to regulate biotech. She has been a consistent, reasoned voice in the environmental community.

Jeremy Rifkin

President, Foundation on Economic Trends, Washington: The bombastic biotech nay-sayer started the year by taking a flying leap at a non-issue: year-old reports of higher risks of leukemia in children taking Genentech's human growth hormone. He found a congressional sponsor for a bill to restrict federal access to genetic information on individuals. He has sued the Food and Drug Administration because some of Showa Denko's L-tryptophan may have been made using recombinant techniques. He has organized a grass-roots effort in Wisconsin and Minnesota to back legislation banning bovine somatotropin (BST). Rifkin insists he isn't through with biotech yet. What next?

Greg Simon

Staff director of the investigations and oversight subcommittee of the House Committee on Science, Space and Technology, Washington: Simon has a bird's-eye view of the biotech scene. He is currently working to strike a compromise between the biotechnology industry and environmental groups over a bill to overhaul the federal review of field tests of genetically modified organisms. Treacherous waters, indeed, where few dare to tread.



Larry Bock,
Avalon Ventures



Ken Kelley,
Institutional Venture Partners



Margaret Mellon,
National Wildlife Federation



Jeremy Rifkin,
Foundation on Economic Trends

Dynamic Pair

David Beier, VP for government affairs, Genentech Inc., South San Francisco, Calif.; and **Lisa Raines**, director of government relations, Industrial Biotechnology Association, Washington: This dynamic duo haunts the halls of Congress and pushes a sometimes controversial biotech agenda. Beier and Raines worked side by side with congressional staff to tone down a bill that would have taken away the market exclusivity provisions of the Orphan Drug Act. This fall they're hard at work generating political steam behind the "Boucher bill."

Science

Dr. Alfred Gilman

Professor of pharmacology, University of Texas Southwestern Medical Center, Dallas: Discovered a class of molecules, called G proteins, that are rapidly becoming the newest darlings of the biotechnology industry. Gilman earned the nickname "The G-man" for his pursuit. G proteins, found buried within cell membranes, are the switchboard of cell-to-cell communication, vital links in the intricate networks that comprise the body's own Bell System. These proteins modulate the cell's response to a wide variety of outside stimuli, including hormones, nerve impulses and cell proliferation.

Understanding how G proteins act is "like giving a thief the security diagram to a bank," according to Gilman. Knowledge of the intricate pathways in which G proteins participate will allow the design of agonists and antagonists that can carry out specific biological actions. Gilman was rewarded last fall with the Lasker Award for Basic Medical Research, which he shared with three other cellular signal decipherers: Drs. Michael Berridge, Edwin Krebs and Yasutomi Nishizuka.

Robert Langer

Professor of Chemical and Biochemical Engineering, MIT, Cambridge, Mass.: Single-handedly provided the technical inventions and concepts that support one of the key

areas of the biotech industry, drug delivery. He is credited with initiating the technical innovations that allowed controlled release of drugs to become a reality and has developed several new classes of biodegradable polymers to use in such devices. While molecular biology provided access to new therapeutics, it quickly became clear that the inability to deliver these products in the right amount to the right part of the body was a major impediment to their optimal use. Langer's ideas are being implemented by Nova Pharmaceuticals, Cygnus Research, BioGrowth, Enzytech and many others.

Philip Leder, M.D.

Chairman, Department of Genetics, Harvard Medical School, Boston: Leder was one of the first researchers to use transgenic mice to study cancer development. Along with co-inventor Timothy Stewart, Leder was awarded the first U.S. patent for a genetically engineered animal. Leder also received a Lasker Award for his pioneering efforts in determining the structure and function of antibodies, including the genetic mechanisms that cause lymphomas.

Catherine Mackey

Director of plant genetics, DeKalb Plant Genetics, Groton, Conn.: With her group at DeKalb Plant Genetics, the first to report solid data on genetically engineered corn, one of the Holy Grails (or is that grains?) of monocot transformation. Monocots such as corn have been the toughest nuts to crack in agricultural biotechnology. This year DeKalb presented impressive data on fertile transgenic corn plants, putting the company ahead of competitors such as Monsanto Co. and BioTechnica International Inc. Mackey, who received a doctorate in microbiology from Cornell University in 1983, has been with DeKalb since that time. She assumed leadership of the maize transformation project in 1985 and has headed the Discovery Research department since 1986.



Greg Simon,
House Committee
on Science, Space
and Technology



Lisa Raines,
I.B.A.



Dr. Alfred Gilman,
University of Texas



Robert Langer,
MIT